

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Nathalie GEORGE-MARCHAL et al.

Examiner: TO BE ASSIGNED

Divisional of Application
Serial No.: 09/305,296

Group Art Unit: TO BE ASSIGNED

Filed:

Title: CATALYST COMPRISING A ZEOLITE Y GLOBALLY NON-
DEALUMINATED AND CONTAINING BORON AND/OR SILICON

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination of the above identified application, please amend the application as follows.

IN THE CLAIMS

Please cancel claims 1 - 3 without prejudice or disclaimer.

Please amend claim 4 as follows.

4. (Amended) A hydrocracking process comprising contacting a hydrocarbon feed with a catalyst comprising:

- 0.1-99.7% by weight of at least one alumina matrix;
- 0.1-80% by weight of at least one globally non dealuminated Y zeolite with a lattice parameter of more than 2.438 nm, a global $\text{SiO}_2/\text{Al}_2\text{O}_3$ mole ratio of less than 8, and a framework $\text{SiO}_2/\text{Al}_2\text{O}_3$ mole ratio of less than 21 and more than the global $\text{SiO}_2/\text{Al}_2\text{O}_3$ mole ratio;
- 0.1-30% by weight of at least one group VIII metal and/or 1-40% by weight of at least one group VIB metal (% oxide);

- 0.1-20% by weight of at least one promoter element selected from the group formed by boron and silicon (% oxide);
- 0-20% by weight of at least one group VIIA element;
- 0-20% by weight of phosphorous (% oxide);
- 0.1-20% by weight of at least one group VIIB element;

carried out at a pressure of at least 2 MPa, a temperature of at least 230°C, using a quantity of hydrogen of at least 100 Nl hydrogen/l of feed and with an hourly space velocity of 0.1-10h⁻¹.

Please add the following new claims:

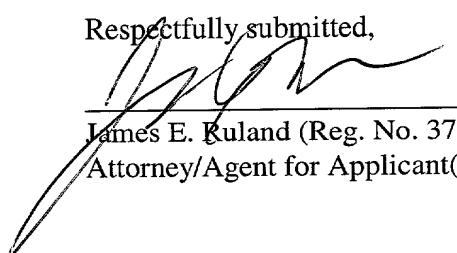
--11. A process according to claim 9, wherein said catalyst comprises boron.

12. A process according to claim 4, wherein said catalyst comprises manganese.--

REMARKS

Applicants hereby present claims 4-12 drawn to a hydrocracking process. If the Examiner has any questions, please contact the undersigned at the number provided below.

Respectfully submitted,


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Date: October 1, 2001

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Claim 4 has been amended as follows.

4. (Amended) A hydrocracking process ~~using comprising~~ contacting a hydrocarbon feed with a catalyst comprising:

- 0.1-99.7% by weight of at least one alumina matrix;
- 0.1-80% by weight of at least one globally non dealuminated Y zeolite with a lattice parameter of more than 2.438 nm, a global SiO₂/Al₂O₃ mole ratio of less than 8, and a framework SiO₂/Al₂O₃ mole ratio of less than 21 and more than the global SiO₂/Al₂O₃ mole ratio;
- 0.1-30% by weight of at least one group VIII metal and/or 1-40% by weight of at least one group VIB metal (% oxide);
- 0.1-20% by weight of at least one promoter element selected from the group formed by boron and silicon (% oxide);
- 0-20% by weight of at least one group VIIA element;
- 0-20% by weight of phosphorous (% oxide);
- 0.1-20% by weight of at least one group VIIB element;

~~according to any one of the preceding claims,~~ carried out at a pressure of at least 2 MPa, a temperature of at least 230 °C, using a quantity of hydrogen of at least 100 Nl hydrogen/l of feed and with an hourly space velocity of 0.1-10h⁻¹.